STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
4601 N Monroe Street • Spokane, Washington 99205-1295 • (509)329-3400

January 31, 2013

Ms. Jan Howell
Sravasti Abbey
692 Country Lane
Newport, WA 99156-9658

Re: Groundwater Permit Application No. G3-30510

Dear Ms. Howell:

We have received your email dated January 31, 2013, asking to withdraw application No. G3-30510.

In accordance with your request, your application is **withdrawn**.

If you have any questions, please contact me at 509 329-3480.

Sincerely,

Jeff MacLennan
Water Resources Program
Eastern Regional Office

JM:ka

By Certified Mail 7011 3500 0001 8626 3801

7011 3500 0001 8626 3801

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com®

OFFICIAL USE

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

Postmark Here

Sent To
Street, Apt. No.; or PO Box No.
City, State, ZIP+4

MS. JAN HOWELL
SRAVASTI ABBEY
692 COUNTRY LANE
NEWPORT, WA 99156-9658

PS Form 3800, August 2006 See Reverse for Instructions

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

MS. JAN HOWELL
SRAVASTI ABBEY
692 COUNTRY LANE
NEWPORT, WA 99156-9658

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Dallas Becker ☑ Agent ☐ Addressee

B. Received by *(Printed Name)* Dallas Becker
C. Date of Delivery 2/4

D. Is delivery address different from item 1? ☑ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number
(Transfer from service lab) 7011 3500 0001 8626 3801

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

☐ CALLED BY
☐ CALLED

WASHINGTON STATE DEPARTMENT OF ECOLOGY

TELEPHONE RECORD

DATE: 1-31-2013 TIME: 0815 STAFF: Mae

FILE NO:	NAME:
G3-30510	Sravasti Abbey

- Reconfirmed w/ Jan Howell, the Abbey's construction mgr, that the Abbey could receive a permit but that it would be for in-house domestic only. ~~If they stay on~~ the permit exempt well ~~is~~ offers more water

- She said she still needed to discuss the options with the Abbey's leadership

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
4601 N Monroe Street • Spokane, Washington 99205-1295 • (509)329-3400

October 30, 2012

Ms. Jan Howell
Sravasti Abbey
692 Country Lane
Newport, WA 99156-9658

Re Well Tag for Well #1, Sravasti Abbey
SW¼SE¼ Section 20, Township 30 North, Range 45 E.W.M.
WRIA 57 – Pend Oreille County

Dear Ms. Howell:

During our meeting last Thursday, I mentioned I would send you a well tag for Well #1, one of the original wells on the Sravasti property. Besides the tag, there is also a flyer giving information on the well tag program and some ideas on the best ways to attach it.

I also talked to one of the senior permit writers regarding closed-loop heat exchange systems. There's no requirement for a water right if the system is completely closed. It's our assumption your contractor will probably know what other permits will be required.

I enjoyed meeting with you and look forward to working with you on your water right needs. Let me know if you have any questions.

Sincerely,

Jeff MacLennan
Water Resources Program
(509) 329-3480
Jefm461@ecy.wa.gov

JM:md
Enclosure: Well Tag BHP627
Well Tagging Requirements Focus Sheet

FIELD REVIEW NOTES

Date: 10/25/2012 **Staff:** MacLennan

FILE NO:	NAME:	
G3-30510	Sravasti Abbey	
PHONE: 509-447-5549	ADDRESS: 692 Country Lane	
GPM 225	ACRE FEET PER YEAR	ACRES/PURPOSE DM (14 Connections); IR (20 Acres); ST; WL; HE; FR

☑ Overall situation: WRIA issue ✓Well location - look for well log

☐ Application

1. 14 Connections 2. Irrigated acres 3. Cisterns 4. GeoThermal

- Check on closed loop HE

☐ 90.44.050 Still to be built

- 1 large temple
- 2 small bldgs

5. 3000 gal. tanks

☐ EXISTING WELLS

Well No./Name	GPS Coordinate		ECY Well ID Tag No.
Well #1	48.07672 (48° 4' 36.192")	117.13889 (117° 8' 20.004")	-
Well #2	48.07753	117.14076	BRB 837

NOTES FROM JOHN COVERT 10/23/2012

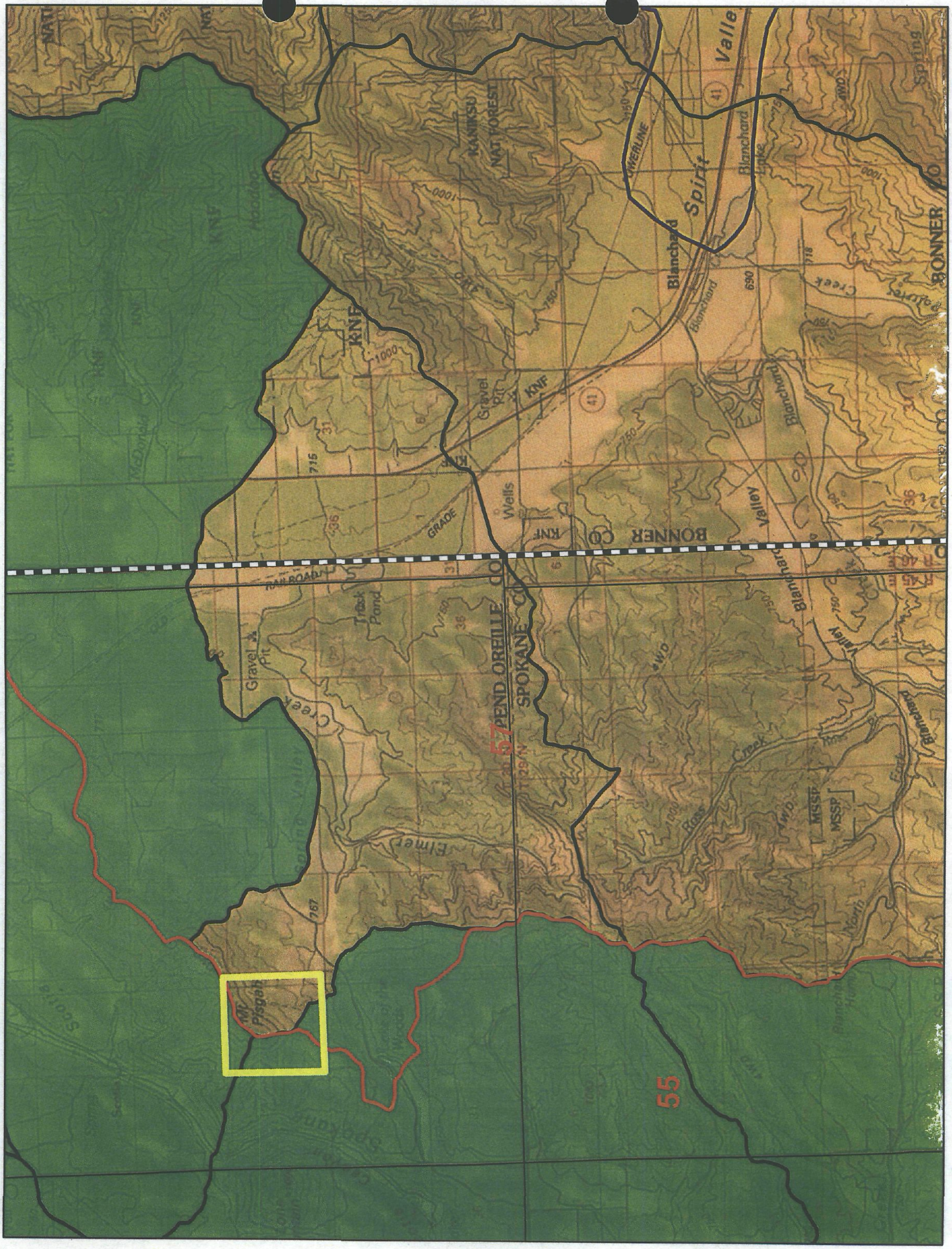
G3-30510, Sravassti Abbey pending water right application.

The application lists two POW: depending on their exact locations, they may be in either WRIA 55 or WRIA 57. It would be difficult to receive a new water right for an application with a source in WRIA 55, given WAC 173-555. If the points of withdrawal are located on the WRIA 57 side of the divide, we will have to consider the matter further.

Well located on the east side of the watershed divide in Section 20, T30N R45E would tap an aquifer that flows eastward towards Elmer Creek and ultimately the Spirit Valley. According to the Bi-state aquifer model report authored by Hsieh et. al., in 2007, the ground-water flow directions and hydraulic connection of this area to the Spokane Valley Rathdrum Prairie aquifer is not well understood. For reasons documented in the report, the modelers intentionally excluded the Spirit Valley area from the model boundary. Ground-water in the area may well flow towards the Pend Oreille River and not be connected to WRIA 57 and the SVRP aquifer. It would be more appropriate to consider this application with the pending applications in WRIA 62 rather than WRIA 57.

In 2010, Sravassti Abbey drilled a domestic exempt well in the SW ¼ of the SE ¼ of Section 20. This 6" diameter well was drilled to 380 feet and completed in granite with a static water level of 125 feet. The well was airtested at 7 gpm. The application requested 225 gpm for community domestic supply and the seasonal irrigation of 20 acres. A nearby domestic well was drilled to a depth of 175 feet and produced 2 gpm from granite. Located at the top of the watershed and producing from granitic rock, it is not likely that a well can be constructed that will reliably produce 225 gpm, nor could it do so without impairing other senior, exempt wells in the area.

It may be possible to approve a water right in the area for a modest amount of water needed for the in-house needs of a religious monastery, but it will likely not include irrigation water.



PEND OREILLE CO
SPOKANE CO
BONNER CO
57
55
KANIKSU NAT FOREST
KNF
Blanchard
Spirit
Valley
Gravel Pit
Track Pond
Wells
GRADE
RAILROAD
Elmer
Ross Creek
MSSP
Mt. Pisgah

The SVRP aquifer consists mostly of sands, gravels, cobbles, and boulders primarily deposited by a series of catastrophic glacial outburst floods from ancient glacial Lake Missoula during the Pleistocene Epoch. Kahle and Bartolino (2007) noted that most of the aquifer sediments deposited in such a high-energy depositional environment are coarse grained. However, they also noted that fine-grained layers of clay and silt are scattered throughout the aquifer and likely were deposited in large proglacial lakes in the path of the Missoula floods. From analysis of drillers' reports, Kahle and Bartolino (2007) found that

> "The aquifer generally has a greater percentage of finer material near the margins of the valley and becomes more coarse and bouldery near the center throughout the Rathdrum Prairie and Spokane Valley. In the Hillyard Trough, the deposits generally are finer grained and the aquifer consists of sand with some gravel, silt, and boulders."

Areal Extent

The areal extent of the SVRP aquifer has been redefined several times in the past 30 years. The most recent definition is the 2005 revised extent of the SVRP aquifer shown in Kahle and others (2005, pl. 2). In most places, the aquifer boundary follows the contact between the coarse, highly permeable aquifer sediments and the surrounding less permeable bedrock and fine-grained material. The 2005 revised extent includes Ramsey Channel, Chilco Channel, the south part of Hoodoo Valley, and the south part of Cocolalla Valley (fig. 1). These four areas lie outside the Sole Source Aquifer as designated by the U.S. Environmental Protection Agency in 1978. In revising the aquifer boundary, Kahle and others (2005, p. 17) noted that

> "For modeling purposes, it may be important to use a more inclusive aquifer boundary to better represent contributions from adjacent surficial deposits that are in hydraulic contact with the Sole Source Aquifer."

For the most part, the extent of the model in this report coincides with the 2005 revised extent. However, the model excludes Spirit and Hoodoo Valleys and three areas where bedrock is close to land surface and the aquifer sediments likely are unsaturated (fig. 1). The model extent is not intended to be a redefinition of the aquifer. As discussed in the following paragraphs, Spirit and Hoodoo Valleys are excluded from the model because of uncertainties about the ground-water flow directions in those valleys and the degree of hydraulic connection between the valleys and northern Rathdrum Prairie.

The 2005 revised extent of the SVRP aquifer extends into the west part of Spirit Valley and the south part of Hoodoo Valley (fig. 2). Kahle and others (2005, p. 20) stated that

> "In the Hoodoo Valley, historical water-level elevations indicated that a water-table divide was between Edgemere and Harlem (Walker, 1964). Ground water north of the divide moved northward toward the Pend Oreille River; ground water south of the divide moved southward toward Athol. In Spirit Valley, the ground-water divide was near Blanchard Lake (Parliman and others, 1980). West of the divide, ground water flows northwestward toward the Pend Oreille River; east of the divide, ground water flows southeastward into the main body of the SVRP aquifer."

An examination of recent water-level data and drillers' reports indicates that the previous characterization is subject to uncertainty. During the synoptic water-level measurements of September 2004 (Campbell, 2005), water levels in wells 262 and 263, at the south end of Hoodoo Valley, were several feet higher than water levels in wells 260 and 261, which are farther to the north (fig. 2, table 1). These water levels indicate that ground water flows to the north (away from northern Rathdrum Prairie) in almost the entire length of Hoodoo Valley. In Spirit Valley, water levels were measured at only one well (well 267) during September 2004. However, a search of the USGS ground-water database produced several water-level measurements for wells in the valley during the late summer of 1998 and 1999. Water levels in wells S-1, S-2, and 267 (fig. 2, table 1) indicate that the ground water flows away from the Rathdrum Prairie in almost the entire length of Spirit Valley.

Table 1. Water levels in wells in and near Spirit and Hoodoo Valleys, Bonner County, Idaho.

[**Well No.:** Location of wells is shown in figure 2. **Abbreviations:** NAVD 88, North American Vertical Datum of 1988]

Well No.	Well name	U.S. Geological Survey site No.	Date of water-level measurement	Altitude of water level, in feet above NAVD 88
260	54N 04W 10BBA1	480300116492401	09-16-2004	2,148.52
261	54N 04W 10DCD1	480209116484201	09-16-2004	2,147.45
262	54N 04W 19BCD1	480051116532101	09-16-2004	2,158.17
263	54N 04W 29ABC1	480015116512901	09-16-2004	2,151
264	54N 04W 30BAB1	480021116531201	09-16-2004	2,044.18
266	54N 04W 31BCB1	475849116521601	09-16-2004	2,035.78
S-1	54N 05W 23DBA1	480046116552201	09-15-1999	2,214
267	54N 05W 22ACA1	480101116563601	08-06-1998	2,190
S-2	54N 05W 18AAA1	480207117001401	09-23-1998	2,185
			09-20-1999	2,189

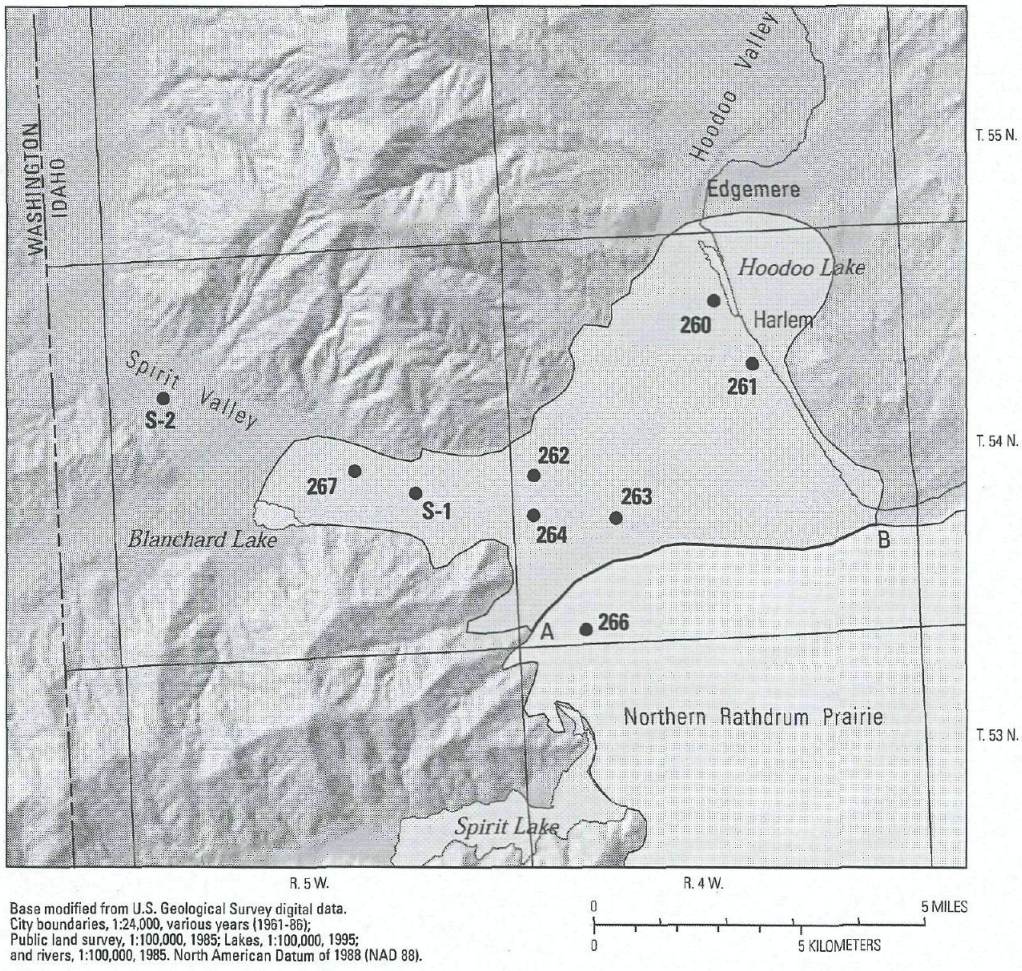
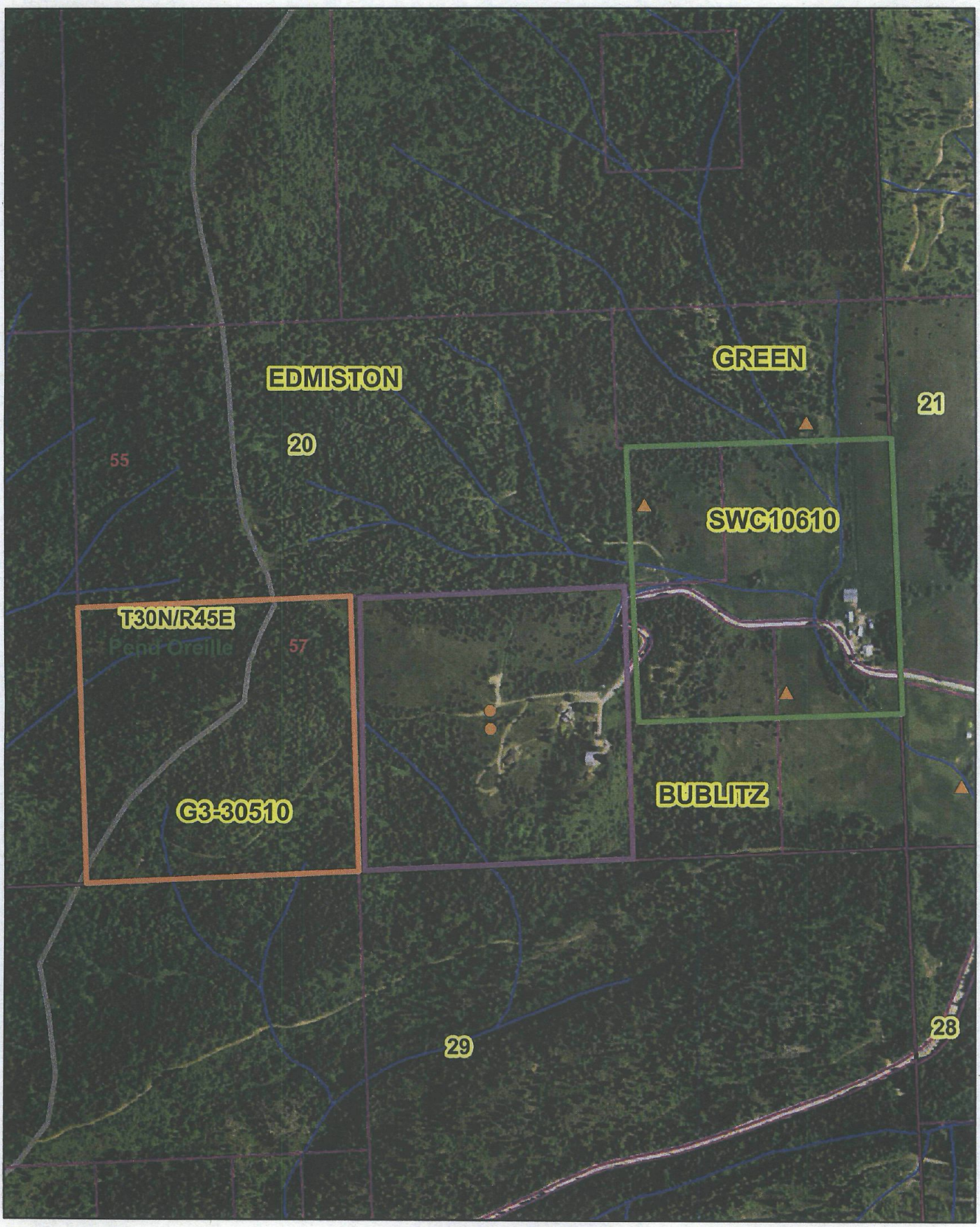


Figure 2. Locations of wells in and near Spirit and Hoodoo Valleys, Bonner County, Idaho.

The synoptic water-level measurements of September 2004 (Campbell, 2005) also show a water-level difference of about 100 ft over a relatively short distance of about 1 mi from the south end of Hoodoo Valley to northern Rathdrum Prairie. Water levels in wells 262 and 263 were 2,158.17 and 2,151 ft, respectively. Water levels in wells 264 and 266 were 2,044.18 and 2,035.78 ft, respectively. Drillers' reports for T. 54 N., R. 4 W. and the north half of T. 53 N., R. 4 W. show a similar water-level difference from the south end of Hoodoo Valley to northern Rathdrum Prairie. The relatively large water-level difference over a relatively short distance can indicate the presence of a low hydraulic conductivity barrier resulting in a poor hydraulic connection between Hoodoo Valley and northern Rathdrum Prairie. However, although clay layers are noted in some drillers' reports for the area, conclusive evidence of a low hydraulic conductivity barrier is lacking.

SRAVASTI ABBEY
G3-30510
2011 Aerial Photo



WATER WELL REPORT

Original – Ecology, 1st copy – owner, 2nd copy – driller

Construction/Decommission *("x" in circle)*

☒ Construction

☐ Decommission *ORIGINAL INSTALLATION* 405393

Notice of Intent Number ____

PROPOSED USE: ☒ Domestic ☐ Industrial ☐ Municipal ☐ DeWater ☐ Irrigation ☐ Test Well ☐ Other ____

TYPE OF WORK: Owner's number of well (if more than one) ____

☒ New well ☐ Reconditioned *Method:* ☐ Dug ☐ Bored ☐ Driven ☐ Deepened ☐ Cable ☒ Rotary ☐ Jetted

DIMENSIONS: Diameter of well 6 inches, drilled 380 ft. Depth of completed well 380 ft.

CONSTRUCTION DETAILS

Casing Installed: ☒ Welded 6" Diam. from +2 ft. to 78 ft. ☒ Liner installed 4" Diam. from 20 ft. to 380 ft. ☐ Threaded ____" Diam. From ____ ft. to ____ ft.

Perforations: ☒ Yes ☐ No

Type of perforator used Saw

SIZE of perfs 1/8 in. by 6 in. and no. of perfs 96 from 180 ft. to 380 ft.

Screens: ☐ Yes ☒ No ☐ K-Pac Location ____

Manufacturer's Name ____

Type ____ Model No. ____

Diam. ____ Slot size ____ from ____ ft. to ____ ft.

Diam. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel/Filter packed: ☐ Yes ☒ No Size of gravel/sand ____

Materials placed from ____ ft. to ____ ft.

Surface Seal: ☒ Yes ☐ No To what depth? 18+ ft.

Material used in seal Bentonite

Did any strata contain unusable water? ☐ Yes ☐ No

Type of water? ____ Depth of strata ____

Method of sealing strata off ____

PUMP: Manufacturer's Name ____

Type: ____ H.P. ____

WATER LEVELS: Land-surface elevation above mean sea level ____ ft.

Static level 125' ft. below top of well Date 11/1/10

Artesian pressure ____ lbs. per square inch Date ____

Artesian water is controlled by ____ cap, valve, etc.)

WELL TESTS: Drawdown is amount water level is lowered below static level

Was a pump test made? ☐ Yes ☒ No If yes, by whom? ____

Yield: ____ gal./min. with ____ ft. drawdown after ____ hrs.

Yield: ____ gal./min. with ____ ft. drawdown after ____ hrs.

Yield: ____ gal./min. with ____ ft. drawdown after ____ hrs.

Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

Time	Water Level	Time	Water Level	Time	Water Level

Date of test Bailer test ____ gal./min. with ____ ft. drawdown after ____ hrs.

Airtest 7+ gal./min. with stem set at 379 ft. for 1 hrs.

Artesian flow ____ g.p.m. Date ____

Temperature of water ____ Was a chemical analysis made? ☐ Yes ☒ No

CURRENT

Notice of Intent No. WE12200

Unique Ecology Well ID Tag No. BBB 837

Water Right Permit No. ____

Property Owner Name **Sravasti Abbey**

Well Street Address 692 Country Lane

City Newport County Pend Oreille

Location SW1/4-1/4 SE1/4 Sec 20 Twn 30 R 45 EWM ☒ Or WWM ☐

Lat/Long (s, t, r Still REQUIRED) Lat Deg ____ Min ____ Sec ____ Long Deg ____ Min ____ Sec ____

Tax Parcel No. 453020009002

CONSTRUCTION OR DECOMMISSION PROCEDURE

Formation: Describe by color, character, size of material and structure, and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of information. (USE ADDITIONAL SHEETS IF NECESSARY.)

MATERIAL	FROM	TO
Granite, decomposed brown with clay	0	43
Granite, medium soft gray	43	75
Granite, medium gray	75	84
Granite, fractured brown & white	84	89
Granite, medium gray & brown with fractures	89	135
Granite, medium hard gray	135	154
Granite, fractured gray & white	154	156
Granite, medium hard gray	156	230
Granite, medium soft brown & white	230	234
Granite, medum hard gray	234	338
Granite, medium soft fractured tan & white	338	345
Granite, medium tan & white	345	355
Granite, medium hard gray	355	380
Aquifers: 338' - 345'		
Shale trap @ 120'		

Start Date 10/28/10 Completed Date 11/1/10

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☒ Driller ☐ Engineer ☐ Trainee Driller or trainee License No. 1719

Name (Print Last, First) **Morgan Joy**

Driller/Engineer/Trainee Signature Morgan Joy

IF TRAINEE: Driller's License No:

Driller's Signature:

Drilling Company **JOYCO DRILLING INC**

Phone **509-292-2000 or 877-292-WELL (9355)**

Address **1813 Willms Road**

City, State, Zip **Elk, WA 99009**

Contractor's Registration No. JOYCOD1923M3 Date 11/3/10 M12/2

ECY 050-1-20 (Rev 3/05)

Ecology is an Equal Opportunity Employer

WELL #1 Well Tag BHP 627

Sravasti Abbey

HUGHES WATER WELLS

Well Drilling • Water Testing • Bonded • Insured • Licensed in Idaho & Washington

648 Silver Birch Lane, Oldtown, ID 83822 • (208) 437-0271

DATE 8-29-03

TO

HAROLD UNRUH
692 COUNTRY LN.
NEWPORT WA. 99156

PUMP TEST

WELL LOCATION: 692 COUNTRY LN.
TEST DATE: 8-29-03
PUMP TEST PERFORMED AT THE RATE OF: 8 ½ GPM
STATIC LEVEL : 107' FROM TOP OF CASING
TEST STARTED AT: 2:45

RESULTS

TIME 3:45 PM **GPM** 8 1/2
TIME 4:45 PM **GPM** 8 1/2
STATIC LEVEL AFTER 2HOURS 120 ***DRAWDOWN:*** 13'

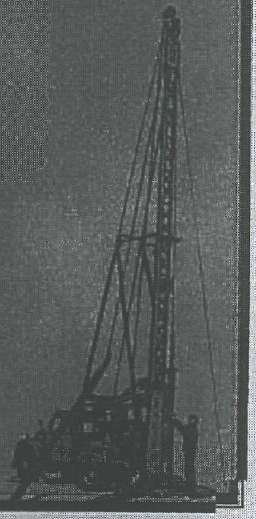
NOTES/COMMENTS

WATER TEMPERATURE: 49.5
PH: 6.44

David L Hughes

DAVID HUGHES
WATER WELL TESTER

THOMAS NOBILE
WATER WELL TESTER



File Original and First Copy with Department of Ecology
Second Copy — Owner's Copy
Third Copy — Driller's Copy

WATER WELL REPORT

STATE OF WASHINGTON

Start Card No. _____
UNIQUE WELL I.D. # _____
Water Right Permit No. _____

(1) OWNER: Name Dean Clark Address 62 Country Lane, Newport, Wa. 99156

(2) LOCATION OF WELL: County Pend Oreille NE 1/4 SW 1/4 Sec 21 T. 30 N., R 45 WM.

(2a) STREET ADDRESS OF WELL (or nearest address) _____

(3) PROPOSED USE: ☒ Domestic ☐ Industrial ☐ Municipal ☐ ☐ Irrigation ☐ Test Well ☐ Other ☐ ☐ DeWater

(4) TYPE OF WORK: Owner's number of well (if more than one) _____
Abandoned ☐ New well ☒ Method: Dug ☐ Bored ☐ Deepened ☐ Cable ☐ Driven ☐ Reconditioned ☐ Rotary ☒ Jetted ☐

(5) DIMENSIONS: Diameter of well 6 inches. Drilled 175 feet. Depth of completed well 174 ft.

(6) CONSTRUCTION DETAILS:
Casing installed: 6 " Diam. from +1 ft. to 19 ft.
Welded ☐ _____ " Diam. from _____ ft. to _____ ft.
Liner installed ☐ Threaded ☐ _____ " Diam. from _____ ft. to _____ ft.

Perforations: Yes ☐ No ☒
Type of perforator used _____
SIZE of perforations _____ in. by _____ in.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.
_____ perforations from _____ ft. to _____ ft.

Screens: Yes ☐ No ☒
Manufacturer's Name _____
Type _____ Model No. _____
Diam. ____ Slot size _____ from _____ ft. to _____ ft.
Diam. ____ Slot size _____ from _____ ft. to _____ ft.

Gravel packed: Yes ☐ No ☒ Size of gravel _____
Gravel placed from _____ ft. to _____ ft.

Surface seal: Yes ☒ No ☐ To what depth? 18+ ft.
Material used in seal Bentonite
Did any strata contain unusable water? Yes ☐ No ☒
Type of water? _____ Depth of strata _____
Method of sealing strata off _____

(7) PUMP: Manufacturer's Name _____
Type: _____ H.P. _____

(8) WATER LEVELS: Land-surface elevation above mean sea level _____ ft.
Static level 38 ft. below top of well Date _____
Artesian pressure _____ lbs. per square inch Date _____
Artesian water is controlled by _____ (Cap, valve, etc.)

(9) WELL TESTS: Drawdown is amount water level is lowered below static level
Was a pump test made? Yes ☐ No ☒ If yes, by whom? _____
Yield: _____ gal./min. with _____ ft. drawdown after _____ hrs.
" " " "
" " " "

Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

Time	Water Level	Time	Water Level	Time	Water Level

Date of test _____
Bailer test _____ gal./min. with _____ ft. drawdown after _____ hrs.
Airtest 2 gal./min. with stem set at _____ ft. for _____ hrs.
Artesian flow _____ g.p.m. Date _____
Temperature of water _____ Was a chemical analysis made? Yes ☐ No ☒

(10) WELL LOG or ABANDONMENT PROCEDURE DESCRIPTION

Formation: Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of information.

MATERIAL		FROM	TO
Overburden		0	3
Granite	Med. Soft	3	23
"	Med.	23	34
"	Soft	34	46
"	Med.	46	63
"	Soft	63	65
"	Med.	65	82
"	Soft	82	83
"	Med.	83	107
"	Soft	107	109
"	Med.	109	133
"	Soft	133	135
"	Med. Hard	135	143
"	Soft	143	145
"	Med.	145	175
Aquifer	134		

RECEIVED
[illegible] ECOLOGY

Work Started 8-4 19 81 Completed 8-5 19 81

WELL CONSTRUCTOR CERTIFICATION:

I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

NAME SAMS DRILLING (PERSON, FIRM, OR CORPORATION) (TYPE OR PRINT)

Address N.36009 Conklin Rd. Elk, Wa. 99009

(Signed) Stacy Sams (WELL DRILLER) License No. 0494

Contractor's Registration No. SAMSD*055LN Date 9-28 19 95

(USE ADDITIONAL SHEETS IF NECESSARY)

Ecology is an Equal Opportunity and Affirmative Action employer. For special accommodation needs, contact the Water Resources Program at (206) 407-6600. The TDD number is (206) 407-6006.

ECY 060-1-20 (9/93) * * f

Please print, sign and return to the Department of Ecology

235225

Water Well Report

RECEIVED

FEB 13 2007

DEPARTMENT OF ECOLOGY
WELL DRILLING UNIT

Original – Ecology, 1st copy – owner, 2nd copy – driller

Construction/Decommission

☑ Construction
☐ Decommission *ORIGINAL INSTALLATION Notice of Intent Number* _____

Current Notice of Intent No. W 235631

Unique Ecology Well ID Tag No. APL 801

Water Right Permit No. _____

Property Owner Name Fred + Lynn Green

Well Street Address 292 Country Ln

City Newport County Pend Oreille

Location NW 1/4-1/4 SE 1/4 Sec 20 Twn 30 R 45 ☐ E ☐ W WWM ☐ circle one

Lat/Long (s, t, r still REQUIRED) Lat Deg _____ Lat Min/Sec _____ Long Deg _____ Long Min/Sec _____

Tax Parcel No. _____

PROPOSED USE: ☑ Domestic ☐ Industrial ☐ Municipal ☐ DeWater ☐ Irrigation ☐ Test Well ☐ Other _____

TYPE OF WORK: Owner's number of well (if more than one) _____

☑ New well ☐ Reconditioned ☐ Deepened *Method:* ☐ Dug ☐ Bored ☐ Driven ☐ Cable ☑ Rotary ☐ Jetted

DIMENSIONS: Diameter of well 6" inches, drilled 103 ft. Depth of completed well 103 ft.

CONSTRUCTION DETAILS

Casing Installed: ☑ Welded 6" Diam. from +1 ft. to 96 ft.
☐ Liner installed _____" Diam. from _____ ft. to _____ ft.
☐ Threaded _____" Diam. from _____ ft. to _____ ft.

Perforations: ☑ Yes ☐ No
Type of perforator used Skillsaw
SIZE of perfs ¼ in. by ⅜ in. and no. of perfs 60 from 63 ft. to 103 ft.

Screens: ☐ Yes ☑ No ☐ K-Pac Location _____
Manufacturer's Name _____
Type _____ Model No. _____
Diam. _____ Slot size _____ from _____ ft. to _____ ft.
Diam. _____ Slot size _____ from _____ ft. to _____ ft.

Gravel/Filter packed: ☐ Yes ☑ No ☐ Size of gravel/sand _____
Materials placed from _____ ft. to _____ ft.

Surface Seal: ☑ Yes ☐ No To what depth? 18 ft.
Material used in seal Bentonite
Did any strata contain unusable water? ☐ Yes ☑ No
Type of water? _____ Depth of strata _____
Method of sealing strata off _____

PUMP: Manufacturer's Name F+W
Type: Sub H.P. 1

WATER LEVELS: Land-surface elevation above mean sea level _____ ft.
Static level 40' ft. below top of well Date _____
Artesian pressure _____ lbs. per square inch Date _____
Artesian water is controlled by _____ (cap, valve, etc.)

WELL TESTS: Drawdown is amount water level is lowered below static level
Was a pump test made? ☐ Yes ☑ No If yes, by whom? _____
Yield: _____ gal./min. with _____ ft. drawdown after _____ hrs.
Yield: _____ gal./min. with _____ ft. drawdown after _____ hrs.
Yield: _____ gal./min. with _____ ft. drawdown after _____ hrs.

Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

Time	Water Level	Time	Water Level	Time	Water Level

Date of test _____
Bailer test _____ gal./min. with _____ ft. drawdown after _____ hrs.
Airtest 30 gal./min. with stem set at 100' ft. for ½ hrs.
Artesian flow _____ g.p.m. Date _____
Temperature of water _____ Was a chemical analysis made? ☐ Yes ☑ No

CONSTRUCTION OR DECOMMISSION PROCEDURE

Formation: Describe by color, character, size of material and structure, and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of information indicate all water encountered. (USE ADDITIONAL SHEETS IF NECESSARY.)

MATERIAL	FROM	TO
Cobbles Gravel	0	20
Mixed Rock	20	40
Mixed Rock	40	60
Mixed Rock	60	96
Granite Fractured	96	103

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07 FEB -6 AM 8:46

Start Date 4-20-06 Completed Date 4-30-06

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

Driller/Engineer/Trainee Name (Print) Doyle Ellis
Driller/Engineer/Trainee Signature Doyle Ellis
Driller or trainee License No. 2421

If TRAINEE,
Driller's Licensed No. _____
Driller's Signature _____

Drilling Company Cascade Ellis Sons
Address 1405 Riverbirch Ln
City, State, Zip Oldtown ID 83822
Contractor's Registration No. CASCAEW104CL Date 5-1-06

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